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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,193	11/13/2001	Michel Wouter Nieuwenhuizen	NL 000613	3019
24737 75	590 06/18/2004		EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001			YENKE, BRIAN P	
BRIARCLIFF I	BRIARCLIFF MANOR, NY 10510		ART UNIT	PAPER NUMBER
			2614  DATE MAILED: 06/18/2004	. /

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)	
10/014,193	NIEUWENHUIZEN, MICHEL WOUTER	
Examiner	Art Unit	
BRIAN P. YENKE	2614	
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#### **DETAILED ACTION**

#### **Drawings**

1. The drawings are objected to because the elements in the figures do not include a text legend describing each respective element. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Objections

2. Claim 11 is objected to because of the following informalities: claim 11 states that it is dependent upon itself, the examiner assumes that claim 11, should be dependent upon claim 10. Appropriate correction is required.

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## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3a. Claims 1 and 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Engel et al., US 5,146,319 in view of Yoshikuni, JP-03245682.

In considering claims 1 and 8,

a) the claimed asymmetrically filtering...is met by Engel discloses a system the processes a digitized luminance signal to improve the transients and to selectively and variably peak the signal to emphasize the low and high frequencies while controlling the overshoot and undershoot of the signal (col 1, line 45-53). Engel discloses that a non-linear filter 46 asymmetrically filters the signal.

However, Engel does not explicitly recite comparing the amounts of preshoots and aftershoot (under and overshoots respectively). Engel discloses the controlling of the preshoots and aftershoots in order to emphasize the corresponding frequencies.

Although, the examiner believes Engel implies knowing/comparing the amount of the shoots, since Engel corrects for the overall effect of the preshoots and aftershoots, the examiner nonetheless incorporates Yoshikuni.

The examiner relies on Yoshikuni which discloses a contour correction circuit which utilizes the amount of preshoot and aftershoot (overshoot) in order to make the ratio between the preshoot and aftershoot constant. Yoshikuni makes the ratio one to

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one (constant) in order to compensate for the signal when the ratio of the preshoot and aftershoot of the input signal is not constant.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Engle which discloses controlling the preshoot and aftershoot to improve the transients in a signal with Yoshikuni by detecting the input signal preshoot and aftershoot and by compensating for any changes when they are detected.

In considering claim 7,

Neither Engel nor Yoshikuni discloses the averaging over a plurality of fields.

However, based upon the type of signal receives interlaced (odd/even fields) or progressive (frames) would determine whether averaging over a plurality of frames or fields.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify both Engel and Yoshikuni which disclose improving the transients in a signal and contour correction by detecting/controlling the preshoots and aftershoots by comparing the preshoots and aftershoots over a plurality of fields or frames, based upon the type of input signal, in order to reduce any variations between image sequences.

3b. Claims 10, 12-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pritchard, US 4,404,584 in view of Yoshikuni, JP-03245682.

In considering claims 10, 12 and 17,

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As disclosed by applicant in the specification, Pritchard, discloses a asymmetrical peaking filter, though does not disclose the detection of the preshoot and aftershoot.

Pritchard discloses a signal processing system which provides symmetrical vertical peaking in order to accommodate the preshoots and aftershoots.

The examiner incorporates Yoshikuni, JP-03245682 which discloses a contour correction circuit which utilizes the amount of preshoot and aftershoot (overshoot) in order to make the ratio between the preshoot and aftershoot constant. Yoshikuni makes the ratio one to one (constant) in order to compensate for the signal when the ratio of the preshoot and aftershoot of the input signal is not constant.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify/utilize in Prichard which discloses the symmetrical vertical peaking of video signals in order to accommodate the preshoots and aftershoots, with Yoshikuni by detecting the input signal preshoot and aftershoot and by compensating for any changes when they are detected.

In considering claim 17.

Pritchard discloses the use of a television where the images are displayed via color image reproducer 57.

In considering claims 13-15,

Neither Pritchard not Yoshikuni disclose adding/varying filter coefficients/shifting in time the preshoots or aftershoots, based upon one signal being larger/smaller than the other.

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However, the examiner maintains that it is conventional in the art to offset a system which utilizes two parameters (i.e. preshoot and aftershoot) by compensating (i.e. frequency folding, adding, changing filter coefficients) for the signal that is not predominate, in order to provide a symmetrical output.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pritchard and Yoshikuni which disclose improving the transients in a signal and contour correction by detecting/controlling the preshoots and aftershoots by compensating for the less predominate signal, by either adding/varying the filter coefficients/and shifting the preshoots and aftershoots, in order to provide the user a clean symmetrical signal for display.

In considering claim 16,

Neither Pritchard nor Yoshikuni disclose feeding the output of the filter back to the input.

However, the use of recursive filters which utilize the output of a filter to predict/correct for the images (fields or frames) being received is conventional in the art, since the output of the filter provides the system an indication/value of the change with respect to the incoming signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify both Pritchard and Yoshikuni which disclose improving the transients in a signal and contour correction by detecting/controlling the preshoots and aftershoots by feeding the output of the filtered signal back to the detection step,

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which would allow the system to recursively filter the signal and maintain current information.

### Allowable Subject Matter

4. Claim 9 is allowed.

Claim 2-6 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see cited references on attached form PTO-892.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-9871. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (703)305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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Primary Examiner

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13 June 2004